

Amendments to the Drawings:

The attached sheets of drawings include changes to Fig. 8. These sheets, which include Fig. 8, replace the Replacement sheets submitted December 3, 2003, including Fig. 8.

Attached: Replacement Sheets

Appendix A: Annotated Sheets Showing Changes

REMARKS

The amendments to the Specification insert required assigned sequence identifiers in their proper locations.

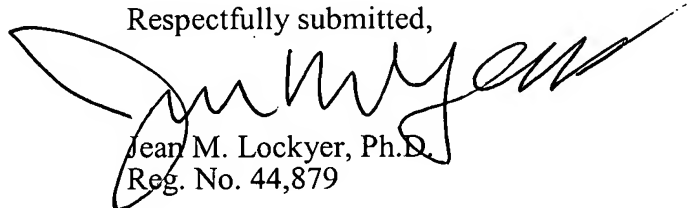
The amended Figure 2 corrects inadvertent errors of a typographical nature made without deceptive intent. These include corrections to 1) a line of incorrect font to realign nucleotide codons with their encoded amino acid residues; 2) word-processing errors which created "wrap-around" lines in amino acid residues; 3) spacing errors resulting in misalignment of codons with their encoded amino acid residues; 4) a lower case instead of upper case amino acid one-letter symbol; and 5) an omission of an alternative amino acid encoded by a degenerate codon.

Applicants request entry of this amendment in adherence with 37 C.F.R. §§1.821 to 1.825. This amendment is accompanied by a floppy disk containing the above named sequences, SEQ ID NOS:1-50, in computer readable form, and a paper copy of the sequence information which has been printed from the floppy disk.

The information contained in the computer readable disk was prepared through the use of the software program "PatentIn" and is identical to that of the paper copy. This amendment contains no new matter.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,



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Attachments
JML:dmw
60113087 v1



Annotated Marked-up Drawing

Figure 8.

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atg atc ctg gat g(t/c)t gac tac atc act gaa ga(a/c) ggc aaa ccg (g/a)tt atc cgt (c/a)t(g/c) ttc
M I L D V/A D Y I T E E/D G K P V/I I R L/I/M F

aaa aaa gag aac ggc (a/g)aa ttt aag (a/g)tt gag (c/t)at gat cgc a(a/c)c ttt cgt cca tac att tac gct
K K E N G K/E F K I/V E H/Y D R N/T F R P Y I Y A

change font
[ctg ctg a(g/a)a gat gat tct (a/c)ag att ga(g/t) gaa gtt a(g/a)a aaa atc act g(g/c)t gag cgc cat ggc aag att]
L L R/K D D S K/Q I E/D E V K/R→ K I T G/A→ E R H G
[K I]

214 215

gtt cgt atc (a/g)tt gat g(t/c)g gaa aag gta (g/a) (g/a)g aag aaa ttt ctg ggc a(a/g)a cca atc (a/g) (a/c)g
V R I I/V→ D V/A→ E K V G/E/R/K→ K K F L G K/R P I
[K/T/E/A]

gtg tgg a(g/a)a ctg tat (c/t)tc gaa cat cca caa gat gtt ccg a(t/c)t att cgc ga(g/t) aaa (g/a)tt cgc
V W K/R→ L Y L/F E H P Q D V P T/A I R E/D→ K V/I R

gaa cat (c/t)ct gca gtt (g/a)tt gac atc ttc gaa tac gat att cca ttt gca aag cgt tac ctc atc gac aaa
E H P/S A V V/I→ D I F E Y D I P F A K R Y L I D K

ggc ctg ata cca atg gag ggc ga(g/t) gaa gaa ctc aag (a/c)tc ctg gcg ttc gat ata gaa acc ctc tat
G L I P M E G E/D→ E E L K I/L L A F D I E T L Y

cac gaa ggc gaa gag ttt g(g/c)t aaa ggc cca att ata atg att agc tat gca gat gaa (a/g)a(a/c) gaa gca aag
H E G E E F G/A→ K G P I I M I S Y A D E K/N/E/D E A
[K]

gtg att act tgg aaa aa(a/c) ata gat ctc cca tac gtt gag gtt gta tct tcc gag cgc gag atg att aag cgc
V I T W K K/N→ I D L P Y V E V V S S E R E M I K R

ttt ctc a(g/a)a (g/a)tt atc cgc gag aag gat ccg gac (g/a)tt atc (g/a)tt act tat aac ggc gac tct ttt
F L R/X→ V/I ← I R E K D P D V/I I ← V/I T Y N G D S F

gac (c/t)tc cca tat ctg g(t/c)g aaa cgc gca gaa aaa ctc ggt att aaa ctg (a/c)ct (a/c)tc ggc cgt gat ggt
D F/L P Y L V/A K R A E K L G I K L T/P ← I/L G R D
[G]

tcc gag ccg aag atg cag cgt (a/c)tc ggc gat atg acc gct gta gaa (g/a)tt aag ggt cgt atc cat ttc gac
S E P K M Q R I/L G D M T A V E V/I K G R I H F D

ctg tat cat gta att (a/c) (c/g)c cgt act att aac ctc ccg act tac act ctc gag gct gta tat gaa gca att
L Y H V I T/S/P/R→ R T I N L P T Y T L E A V Y E A I

ttt ggt aag ccg aag gag aag gta tac gcc (g/c)at gag att gca (a/g)ag gcg tgg gaa (a/t)cc ggt (a/g)ag
F G K P K E K V Y A D/H E I A K/E A W E T/S G K/E

(a/g) (a/g)c ctc gag cgt gtt gca aaa tac tcc atg gaa gat gca aag g(t/c)g act tat gaa ctc ggc a(g/a)a gaa ttc
N/G/D/S→ L E R V A K Y S M E D A K V/A→ T Y E L G→ R/K
[E F]



Annotated Marked-up Drawing

(c/t)tc cca atg gaa (a/g)(t/c)t cag ctc tct cgc ctg gtt ggc caa cca ctg tgg gat gtt tct cgt tct tcc
L/F→ P M E I/T/V/A Q L S R L V G Q P L W D V S R S S→

acc ggt aac ctc gta gag tgg t(t/a)t ctc ctg cgc aaa gcg tac gaa cgc aac gaa (g/c)tg gct ccg aac aag
T G N L V E W F/Y L L R K A Y E R N E ←V/L A P N K

cca (t/g)(c/a)c gaa (c/g)(g/a)a gag tat (c/g)aa cgc cgt ctc cgc gag tct tac (a/g)ct ggt ggc t(t/a)t
P S/Y/A/D→ E R/Q/G/E E Y ←Q/E R R L R E S Y T/A G G ←F/Y

gtt aaa gag cca gaa aag ggc ctc tgg gaa (a/g)(a/g)c (a/c)tc gtg t(c/a)c ctc gat ttt cgc (g/t)ct ctg
V K E P E K G L W E N/S/D/G I/L V Y/S L D F R A/S L

tat ccg tct att atc att acc cac aac gtg tct ccg gat act ctc aac c(t/g)c gag ggc tgc a(g/a)a
Y P S I I I T H N V S P D T L N L/R→ E G C K/R

(a/g)a(a/c) tat gat (g/a)tt gct ccg (c/g)aa gta ggc cac aag ttc tgc aag gac (a/t)tc ccg ggc ttt att
K/N/E/D→ Y D V/I A P Q/E V G H K F C K D ←I/F P G F I

ccg tct ctc ctg (a/g)(a/g)g c(a/g)t ctg ctc ga(g/t) gaa cgc caa (a/g)ag att aag (a/c)(g/c)c aaa atg aag
P S L L ←K/R/E/G R/H L L E/D→ E R Q ←K/E I K ←T/S/P/R K M K

g(a/c)g (a/t)cc (c/a)ag gat ccg att gaa aaa a(t/a)a (a/c)tg ctc gac tat cgc caa a(g/a)a gcg att aaa
E/R→ T/S Q/K D P I E K I/K→ M/L L D Y R Q R/K A I K

(a/c)tc ctc gca aac tct t(a/t)t tac ggc tat tat ggc tat gca aaa gca cgc tgg tac tgt aag gag tgt gct
L/I→ L A N S F/Y→ Y G Y Y G Y A K A R W Y C K E C A

gag tcc gtt act gct tgg ggt cgc (a/g)aa tac atc gag (c/t)tc gtg (t/c)gg aag gag ctc gaa gaa aag ttt ggc
E S V T A W G R K/E Y I E L/F V W/R K E L E E K F G

ttt aaa gtt ctc tac att gac act gat ggt ctc tat gcg act att ccg ggt g(g/c)t (a/g)ag (c/t)ct gag
F K V L Y I D T D G L Y A T I P G G/A→ E/K S/P E

1696

gaa att aag aaa aag gct ctc gaa ttt gtg aaa tac att aac (g/t)cg aag ctc ccg ggt ctc ctg gag ctc gaa
E I K K K A L E F V K(D) Y I N A/S→ K L P G L L E L E

tat gaa ggc ttt tat (g/a)(t/a)g cgc ggc ttc ttc gtt acc aag aag a(g/a)a tat gcg (g/c)tg att gat gaa gaa
Y E G F Y V/E/M/K→ R G F F V T K K R/K→ Y A ←V/L I D E E

ggc aaa (g/a)tt att act cgt ggt ctc gag att gtg cgc cgt gat tgg agc gaa att gcg aaa gaa act caa gct
G K V/I I T R G L E I V R R D W S E I A K E T Q A

a(g/a)a gtt ctc gag (a/g)ct att ctc aaa cac ggc (g/a)ac gtt gaa gaa gct gtg a(g/a)a att gta aaa gaa gta
R/K→ V L E T/A I L K H G D/N V E E A V R/K→ I V K E V

a(t/c)c (c/g)aa aag ctc (g/t)ct aa(a/c) tat gaa att ccg cca gag aag ctc g(t/c)g att tat gag cag att
I/T→ ←Q/E K L A/S K/N Y E I P P E K L ←V/A I Y E Q I

act cgc ccg ctg cat gag tat aag gcg att ggt ccg cac gtg gct gtt gca aag a(g/a)a ctg gct gct a(g/a)a ggc gtg
T R P L H E Y K A I G P H V A V A K R/K→ L A A K/R→ G V

aaa (g/a)tt a(g/a)a ccg ggt atg gta att ggc tac att gta ctc cgc ggc gat ggt ccg att agc aa(a/c) cgt gca
K V/I R/K→ P G M V I G Y I V L R G D G P I S K/N→ R A



Annotated Marked-up Drawing

att cta gct gag gaa t(t/a)c gat c(c/t)g a(g/a)a aag cac aag tat gac gca gaa tat tac att gag aac cag gtg
I L A E E F/Y→ D P/L K/R→ K H K Y D A E Y Y I E N Q V
2272 2273
ctc ccg gcg gta ctc cgt att ctg gag g(g/c)t ttt ggc tac cgt aag gaa gac ctc cgc t(a/g)(c/g) caa aag
L P A V L R I L E G/A→ F G Y R K E D L R Y/W/*C→ Q K
act a(g/a)a cag (g/a)(t/c)t ggc ctc act (g/t)ct tgg ctc aac att aaa aaa tcc ggt acc cac tag tgc tag cat gac
T K/R→ Q V/A/I/T G L T A/S W L N I K K S G T H *